

JOHNE'S DISEASE

SPECIES AFFECTED

Ruminants

DESCRIPTION

Paratuberculosis is a chronic mycobacterial disease characterized by irreversible wasting, diarrhea and death from starvation in ruminants. This disease is caused by the bacteria *Mycobacterium avium subsp. paratuberculosis*. Infection generally occurs early in life, and many infected animals become chronic carriers. Unless testing is done, paratuberculosis can exist undetected in a herd for years. Only a few carriers develop overt disease, usually after several years, and the symptoms can be confused with other diseases. Paratuberculosis also causes production losses in asymptotically infected animals. Subclinical carriers are estimated to produce 15-16% less milk, with losses of 1,300-2,800 pounds of milk per lactation. There is no effective treatment. Unless measures are taken to control or eradicate the organism, the prevalence of infection gradually increases in the herd and greater numbers of animals become clinically ill. Recently, *M. avium subsp. paratuberculosis* has been isolated from many nonruminant species, including both mammals and birds. Little is known about these infections; however, some species could act as reservoirs for paratuberculosis in domesticated ruminants, and some might develop clinical disease. *M. avium subsp. paratuberculosis* has also been implicated as a possible cause of Crohn's disease in humans; this connection is still controversial and unproven. Control programs for paratuberculosis have been established in some nations including Australia, Norway, Iceland, Japan, the Netherlands and the United States.